

REMARKS

Claims 1 to 29 remain pending. Claims 11, 12 and 19 to 24 have been withdrawn.

Claims 1 to 10 and 13 to 18 have been rejected under 35 U.S.C. 112, first paragraph, as being non-enabled. The Action alleges that the specification does not provide enablement for cultured substantially undifferentiated plant seed cells. The Action admits that the specification provides enablement for homogenized seed cell broth. The Action states that the claim language includes even the whole seed because the cells are not isolated. The Action also states that applicants teach culturing whole seeds or portions thereof at page 5, second paragraph. The Action further states that the specification provides no guidance on incorporating a culture having plant seed cells into a composition. The Action admits that the specification enables a homogenized cultured seed cell in broth medium. The Action further states that the specification provides no guidance regarding how a culture containing whole seeds, without homogenization, is incorporated into a composition. The Action still further states that this lack of guidance renders the claimed invention unpredictable in terms of using undifferentiated seed cells.

The rejection of claims 1 to 10 and 13 to 18 under 35 U.S.C. 112, first paragraph, is not well taken for the reasons set forth below. The specification is indeed enabling with respect to the above claims.

The allegation that the specification is nonenabling regarding how culture media would be incorporated into the claimed composition not well taken. The presence of whole plant seeds or portions thereof in a culture media does not render nonenabling the incorporation of same into a composition of the present invention. Claims 1 to 10 and 13 to 18 do not require the presence of whole plant seeds or portions thereof but also do not preclude their presence. There is no technical reason that would preclude the presence of whole plant seeds or portions thereof in a topical composition. On the contrary, particulates, such as talc, pumice, and silica, are commonly incorporated into topical compositions. In any event, if seeds or portions thereof are present and a composition without either is desired, it is well within the ordinary skill in the art to remove such seeds or portions thereof by well-known techniques, such as filtration. Working examples of compositions having such seeds or portions thereof are not necessary in any event, but are particularly not called for in view of the reasons stated above. Regarding incorporation of seed cells from the coconut plant, those obtained from portions of coconut seed or from seed cell constituents of coconut seed are clearly within the scope of the claimed invention as set forth in claim 25.

Claim 25 has been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Action stated that the specification lacks disclosure on using a portion of the coconut seed or its constituents.

The rejection of claim 25 under 35 U.S.C. 112, second paragraph, is not well taken. The specification clearly refers to portions of seeds at page 5, lines 10 to 13. The specification even discloses examples of portions, such as endosperm and embryo. Although the Action referred to the rejection as being under 35 U.S.C. 112, first paragraph, it was construed as being 35 U.S.C. 112, second paragraph, since that paragraph refers to the written description requirement.

Claims 17 and 18 have been rejected under 35 U.S.C. 112, first paragraph, as being non-enabled. The Action admits that the specification is enabling for improving the aesthetic appearance of skin. The Action alleges that the specification does not enable preventing loss of collagen and elastin, skin atrophy, wrinkles, hyperpigmentation, skin sagging, loss of glycosaminoglycans, or cellulite formation.

The rejection of claims 17 and 18 under 35 U.S.C. 112, first paragraph, is not well taken. The specification is enabling for both "treating" and "preventing" with respect to the improvements set forth in claims 17 and 18. Treating and preventing are not mutually exclusive. For instance, wrinkling due to photoaging can be prevented by application of sunscreens, which prevent UV light from inflicting damage to the skin or which allow existing damage to be repaired by intrinsic physiological mechanisms through preventing further exposure to damaging UV radiation. Thus, it is mere speculation to consider "treating" and "preventing" as exclusive with respect to each other and to consider disclosure supporting enablement of "treating" to not also support enablement of "preventing."

Claims 1, 8 to 10, and 13 have been rejected under 35 U.S.C. 102(b), as being anticipated by U.S. Patent No. 5,698,423 ('423). The Action stated that the cited reference of the rejection was U.S. Patent No. 5,698,423 ('423), but this appears to be in error. Passages cited later in the Action refer to paragraph numbers, which imply a published U.S. patent application. The Action also refers to a "US '878," which does not correlate to the cited U.S. Patent No. 5,698,423 ('423). For purposes of analysis and review, the published U.S. patent application is presumed to be U.S. Published Patent Application No. 2002/0071878 A1 ('878).

The Action states that '878 discloses a topical composition having cultured seed cells obtained from cucumber and carrot is used in cosmetic and dermatological compositions. The Action states that the composition is used to treat skin disorders, such as hirsutism, reduction in nail growth, hair treatment, and inhibition of scar formation.

'878 relates to a composition having an extract obtained from cell or tissue of an organism capable of entering a phase of dormancy in at least one of its parts. The composition has at least one substance that induces or maintains a state of dormancy (see Abstract). Dormancy is defined in '878 as a state in which there is a marked decrease in the metabolic rate of cells resulting in the inhibition of growth and proliferation of the cells or tissue (page 2, [0014]). In dormancy, a plant's metabolism is extremely low, and the plant growth process is significantly inhibited, although differentiation of certain

cells may occur (page 1, [0006], lines 4 to 6). The composition is used in human medicine and cosmetics (page 2, [0024], lines 5 and 6).

The rejection of claims 1, 8 to 10, and 13 under 35 U.S.C. 102(b) over '878 is not well taken. Independent claims 1 and 13 require a composition or method of improvement wherein the composition has cultured, substantially undifferentiated plant seed cells. In contrast, '878 does not disclose compositions or methods of improvement having cultured, substantially undifferentiated plant seed cells. The claimed invention and '878 are different for the following reasons:

1) Dormancy and non-differentiation are not synonymous. Dormancy is applicable to both differentiated and undifferentiated cells. Dormancy relates to the metabolic rate of cells (see page 2, [0014] of '878), while differentiation relates to change in the function or chemical constituency of cells (page 4, middle paragraph of specification).

2) The claim language "cultured" to describe the substantially undifferentiated cells is incongruent with dormancy since culturing or previous culturing necessarily includes or included exposure of cells to a nutrient medium to encourage cell growth, cell metabolism, and proliferation (page 5, middle paragraph of specification). Encouragement of cell growth, cell metabolism, and proliferation is opposite to dormancy, which '878 defines as a state in which there is a marked decrease in the metabolic rate of cells resulting in the inhibition of growth and proliferation of the cells or tissue (page 2, [0014]).

3) The disclosure of '878 itself distinguishes between dormancy and differentiation. '878 states at page 1, [0006], lines 4 to 6, that "In dormancy, a plant's metabolism is extremely low, and the plant growth process is significantly inhibited, although differentiation of certain cells may occur." Thus, '878 admits that differentiation can occur even during dormancy and that the meanings of the two terms are not the same. Therefore, the claim requirement that cells be substantially undifferentiated distinguishes the disclosure of '878.

Claims 2 to 6, 14 to 18, and 25 to 29 have been rejected under 35 U.S.C. 103(a) as being unpatentable over '878 in view of WO 00/64472 ('472). The Action admits that '878 does not teach the amount of plant seed cells claimed in claims 2 to 5, 7, 15, and 16, the specific plants claimed in claims 6, 14, and 25 to 29, and the specific skin conditions treated by the composition. The Action states that '472 discloses the treatment of dermatological conditions using fruit extracts. The Action also states that extract concentration can vary from 0.1 to 20% and can be obtained from the seed. The Action further stated that it was obvious to vary the amount of extract to achieve beneficial effect and to select specific seeds depending on the specific condition. The Action still further stated that it was obvious to provide the composition of '878 and to select amount and specific seeds depending on treated condition as disclosed in '472.

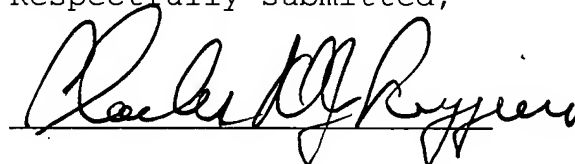
The rejection of claims 2 to 6, 14 to 18, and 25 to 29 under 35 U.S.C. 103(a) as being unpatentable over '878 in view of '472

is not well taken. As discussed above in the rejection under 35 U.S.C. 102(b), '878 does not disclose a composition or method of improvement wherein the composition as substantially undifferentiated plant seed cells. Thus, the combination of '878 and '472 cannot yield the present invention.

Reconsideration of claims 1 to 10, 13 to 18 and 25 to 29 is deemed warranted in view of the foregoing, and allowance of said claims is earnestly solicited.

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Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Charles N. J. Ruggiero", written over a horizontal line.

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